

Q&A for Elevated Manganese in HW-8a Well (2nd round)

Q: Why is EPA taking additional samples at this home, and not others?

A: In reviewing data we realized we had a data gap. Specifically, we did not take samples after the existing treatment units at the two trailers served by this one home well. That data is important to help us determine whether the residents will have drinking water that does not present a health concern.

Q: Are you going to continue to provide water to this residence?

A: We will continue to provide water to this resident until we have received and evaluated results from the re-sampling.

Q: Why are the elevated levels of concern?

A: Although manganese is an essential nutrient at low doses, chronic exposure to high doses may be harmful. Applying EPA's Drinking Water Advisory for manganese suggests that an intake of manganese from drinking water of 1680 ug/day would not result in any adverse health effects over a lifetime of exposure. The highest level found overall among the 64 Dimock homes for manganese was 942 ug/l at this well from the 2nd round sampling. Assuming a person consumes 2 liters of water per day with this level of manganese, the manganese intake would be 1884 ug/day (2 x 942), exceeding EPA's health advisory.

Q: Does EPA have standards for manganese?

A: EPA has a Secondary Maximum Contaminant Level (SMCL) of 50 ug/l and the Drinking Water Advisory for manganese suggests that an intake of manganese from drinking water of 1680 ug/day would not result in any adverse health effects over a lifetime of exposure.

Q: Has EPA ever taken such an action under CERCLA for these types of manganese levels in the past?

A: Yes, part of the original justification for initiating a removal action at Dimock was elevated concentration of manganese.

Q: Can you help ensure the existing treatment system will work?

A: EPA sees the operation and maintenance of existing treatment system owned by the residents to be the responsibility of the residents. We do however believe it is appropriate for EPA to inform the residents on whether their treatment systems are in fact providing drinking water of good quality. Taking additional samples will enable us to fulfill that objective.

Q: What will EPA do if elevated levels of manganese are found at the tap?

A: EPA will determine any additional actions after a thorough review of the results of the re-sampling.

Q: Does EPA have authority to take action over elevated levels of manganese in a residential well?

A: Yes. Manganese is a hazardous substance under CERCLA, which gives EPA authority to respond to the release or threat of release of a hazardous substance.

Q: Is this within the scope of EPA's initial investigation into water quality in Dimock?

A: Yes. This action is within the scope of the investigation as described in the action memo.